Three luffing cranes powered from a 32A mains

Situation

Situated directly above a major underground train station, with limited space, restricted access and strict weight limits, this intercity project needed power at the base of three luffing cranes.

Available on-site power source

32A three-phase mains power

Primary load requirement

3x Comansa luffing cranes

Crane uptime

100% across 371 days



BUILT is delivering a 19-storey student accommodation building on an inner-city Perth site over a busy underground train station.

Each of the three Comansa luffing cranes stand on purpose-built mounting structures with limited space at the base of each. They needed to find an alternative to diesel generators due to city restrictions and 10ft containerised batteries were proving too big for the site.

Because of size, weight and cabling constraints, BUILT went with three E-Gen300 units. Weighing only 1,150kg, at a 10th the size of a 10-foot containerised alternative, the E-Gen300 could be slotted next to the cranes under the surrounding structures. They were easily transported around the site if and when needed — all with a telehandler.

The E-Gen300 on TC1 was also able to take over responsibility for powering the site offices, lunchrooms and sheds without taking up additional site space. Each of the E-Gen units charged from a single 32A three-phase mains supply and delivered up to 300kVA to each crane.

Project	City Link Student Accommodation
Construction company	BUILT
Location	Perth, Western Australia, Australia
Project start	May 2026
Site loads	2x Comansa CML310-24t 1x Comansa CML190-18t
Input feed	32A three-phase mains supply
Power requirement	500kVA
Battery system	3x E-Gen300 supplied by WA Universal

For more information contact us at—
info@cranepower.com

By the numbers

Summary

A single 32A mains input + E-Gen300 units powered the three tower cranes on site compared to the diesel generators that would have been required to do the same job.



Equivalent diesel generator replaced

300kVA

COMANSA CML310-24T [TC1]

After a 10-foot containerised BESS tasked with site power restricted the primary site access point and had to be relocated, the E-Gen300 at the base of TC1 was not only able to power the crane but also take over responsibility for powering the site offices, lunchrooms and sheds.

$33,645
Diesel equivalent saved (AUD)

Equivalent diesel generator replaced

400kVA

COMANSA CML310-24T [TC2]

With TC2 installed at the corner of the site's perimeter, every other available BESS option would have sat outside the site boundary, which was not a viable option. The E-Gen300 was small and light enough that it could be sat directly below the crane.

$106,021
Diesel equivalent saved (AUD)





Equivalent diesel generator replaced

250kVA

COMANSA CML190-18T [TC3]

Situated at the centre of the building, this E-Gen300 was simply installed using an on-site telehandler at the base of TC3, where overhead access was restricted.

$20,202
Diesel equivalent saved (AUD)